

**SITUATION REPORT NO. 4**  
**INCIDENT NO. 98-001**  
**DATE: May 27, 1998      TIME: 11:00 a.m.**

TO: Governor Edward T. Schafer  
State Capitol  
Bismarck, ND 58505

1. NATURE OF DISASTER: Devils Lake Basin and eastern North Dakota flooding.
2. DEATHS AND INJURIES: No change from previous reports.
3. DAMAGES: Devils Lake at Creel Bay had risen to 1,444.67 feet by May 26. National Weather Service hydrologists expect Devils Lake to peak during mid-summer 2 to 2 ½ feet higher than the 1997 record level of 1,443 feet.

Counties in the Devils Lake Basin and areas of eastern North Dakota continue to report substantial infrastructure damages as a result of spring runoff and a rising Devils Lake. Updates to their ongoing initial damage assessment reports are as follows:

**Barnes County**

The Barnes County Commission issued a disaster declaration on May 21. Barnes County has estimated \$102,843 in flood damages has occurred to 16 sites. The initial assessment has not been completed. Emergency repair work includes replacement of culverts and building up saturated roadbeds.

**Benson County**

In Benson County, an estimated \$2 million in damages occurred to the Brinsmade East and the Woods-Rutten Roads. These are both Federal Aid System (FAS) roads. The Woods-Rutten Road was closed on April 13 after water began flowing over the road.

Benson County township and county non-FAS roads are not firming up and are soft. Mud and dirt are reported to be pushing up through gravel. As a result, countywide load restrictions remain in effect.

Benson County's damage estimate is \$500,000 on off-system roads. This estimate is based on several culvert and bridge washouts that occurred during the spring runoff. Throughout the county, spring runoff has washed out culverts, has undermined the integrity of roads and has caused deep rutting on extremely soft roadways. Road crews expected these soft roadways to "heal up" after frost left the ground. However, with the high ground water, the "soft spots" remain and are worsening with traffic. Much of this is new damage and has not been damaged in previous disasters.

Minnewaukan city officials are working with state and federal officials to determine potential measures for protecting that community from a rising Devils Lake.

**Dickey County**

The Dickey County Commission issued a disaster declaration on May 18. The county has suffered damages to roads, bridges, culverts and farmlands because of above normal precipitation in April and May. Infrastructure damages identified so far are estimated at about \$200,000.

**Nelson County**

Estimates supplied by the Nelson County Extension Agent reflect a growing trend of farm operators (crops or livestock) who are quitting farming. In 1996, Nelson County lost 17 farm operations

compared to 35 in 1997 and 43 in the spring of 1998. Of these, 63 percent are considered small farmers producing less than \$150,000 in crops and livestock; 35 percent are moderate producers with \$150,000 to \$249,000 in crops; and 2 percent are large producers with \$250,000 in the sale of crops, livestock, livestock products and receipts of all government payments. Of these operators, 19 percent were forced to quit farming because they had little or no equity, 34 percent quit to save the equity they have, and the remainder either retired or had other reasons for quitting.

Nelson County officials place damages to 73 county road sites at \$73,000. Nelson County townships have not completed initial assessment at this time. Townships have abandoned roads that they cannot afford to fix.

### **Pembina County**

In Pembina County, officials indicate a total of \$87,844 in damages occurred to 24 road sites. Damage to the DeFoe Bridge totals \$250,000.

### **Pierce County**

Initial damage assessment information, compiled by county and township officials, indicates more than \$356,346 in damage has occurred to 124 road sites in 19 townships in Pierce County. Spring runoff problems are aggravated by high soil moisture content in the area.

### **Ramsey County**

Ramsey County Commission issued an emergency declaration on April 7 and a disaster declaration on May 19.

Officials for the cities of Devils Lake, Edmore and Bocket, Ramsey County and its townships have completed an initial damage assessment. Their findings are as follows:

City streets in Ramsey County:	Cost damage estimates are:
Devils Lake	\$ 955,737.80
Edmore	41,200.00
Bocket	8,000.00
Public Agencies have cost estimate of:	
Ramsey County Township Roads	245,000.00
Ramsey County Highway Dept. (FAS system – excluding Woods-Rutten Road)	600,000.00
Ramsey County Highway (Bridge work)	10,000.00
Ramsey County Highway (non-FAS)	30,000.00
Ramsey County Water Board :	
Channel A bank erosion	10,000.00
Control structure damage	<u>2,000.00</u>
Total Ramsey Co. Water Board	12,000.00
Ramsey County Rural Utilities:	
Clean-out of sewer system	500,000.00
Raising of lift stations	<u>18,000.00</u>
Total Ramsey Co. Rural Utilities	<u>518,000.00</u>
TOTAL	\$ <u>2,419,937.80</u>

### **Ransom County**

The Ransom County Commission issued an emergency declaration on April 7 and a disaster declaration on May 19. The Ransom County Water Board is currently repairing a drain in the McLeod area with repair costs estimated at \$20,000. The Ransom County Highway Superintendent has estimated county highway repairs to be \$35,000 to \$45,000. Ransom County township roads do not yet have a damage estimate, but townships are reporting their roads are in as bad or worse

shape than last year. Homeowners, primarily in the McLeod area, are pumping basements, and in some cases their basements have filled with water.

The U.S. Department of Agriculture (USDA) has estimated 13,150 agricultural acres are affected by flood waters in Ransom County. The U.S. Forest Service estimates a 10 to 20 percent loss of pasture acres.

### **Richland County**

The Richland County Commission issued an emergency declaration on May 19. An estimate on road damage was \$500,000 for 105 sites.

### **Rolette County**

The Rolette County Commission issued a disaster declaration on May 5. In Rolette County, officials indicate \$45,800 in damages to 66 road sites and culverts.

### **Sargent County**

The Sargent County Commission issued a disaster declaration on May 14. Cities of Cogswell and Forman have declared city emergency declarations.

Cropland has become inundated with sheet water causing a complete halt to farm activity in the southern half of Sargent County. Land is either untillable due to water or has been tilled and flooded out. Fifty-six sites in Sargent County have been inundated for either long term or short term due to flash flooding or low-lying flooded areas. These low-lying areas have filled with water because every place is full and water is now looking for new places to run. The 56 sites sustained damages from gravel wash of pit run and aggregate surface gravel. Road shoulders are suffering from wind erosion as the waves beat the shoulders. Township initial damage assessments are estimated at \$17,800. County road initial damages are estimated at \$15,000.

The City of Cogswell has ongoing lift station problems. Water rationing measures are in effect for residents.

The Forman Public Golf Course is holding a lot of water at this time causing an estimated \$5,000 in damages to the greens, fairways, trees and one pump house. A private manufactured home court in Forman has become inundated with water. The water is two to three feet high, affecting skirting on most manufactured homes. Six of 15 manufactured homes have water that could possibly start seeping into the main floor. The American Red Cross, at the request of the Sargent County Emergency Manager, is conducting a preliminary damage assessment at the manufactured home court. Forman workers have sandbagged one lift station located near the trailer park to continue to provide service to the residents. City workers have shut down another lift station to an industrial park area because of high water. The lift station provides service to two small businesses.

### **Spirit Lake Nation**

The Spirit Lake Tribe issued an emergency declaration on March 20.

Spirit Lake Nation leaders have called for a voluntary evacuation of 25 homes along the Steffan Dike in Mission Township. Flood waters are eroding the rip-rap along the dike. Spirit Lake Nation, through North Dakota Emergency Management, has requested and is receiving technical and material assistance from the St. Paul District of the U.S. Army Corps of Engineers (USACE) to restore the integrity of this dike. These repairs are

needed so tribal officials can complete the removal of homes and initiate protective measures to a FAA tower. The repairs are expected to be completed during the last week of May.

There are 45 homes still in the flood plain that need to be removed. Tribal representatives continue to conduct an assessment of road systems and additional damages.

### **Towner County**

Towner County Commission issued a disaster declaration on April 7. Damage to county roads is estimated at \$40,000.

4. **RESOURCES:**

**LOCAL:** No change from previous reports.

**STATE:** No change from previous reports.

**FEDERAL:** No change from previous reports.

5. **VOLUNTEER ACTION:** Lutheran Disaster Response has secured office space at Our Savior's Lutheran Church in Devils Lake. Staff will focus on developing a resource manual, sponsoring programs in different communities, offering family assistance, coordinating an equipment and tool lending program and providing structural assessment. A resource coordinator will conduct home visits with disaster-affected families.

6. **MAJOR ACTIONS:** Based on the results of the initial state and local damages which have occurred as a result of flooding in and around the Devils Lake Basin and also in some portions of southeastern North Dakota, the Division of Emergency Management has requested that Federal Emergency Management Agency (FEMA) assist state and local officials in conducting a Preliminary Damage Assessment (PDA) in Barnes, Benson, Dickey, Nelson, Pembina, Pierce, Ramsey, Ransom, Richland, Rolette, Sargent, and Towner Counties as well as on the Spirit Lake Nation. The purpose of this PDA is to validate the impacts of the current damages in relationship to potential state and/or federal assistance in support of repair efforts.

A State Flood Coordination Center meeting was held in Devils Lake on May 14, 1998.

### **N.D. Department of Health**

The Department of Health has re-established a water quality monitoring network in the Devils Lake chain of lakes. Nine sites (four at West Bay, and one each at Six Mile Bay, Main Bay, Creel Bay, East Bay, and East Devils Lake) will be monitored five to six times during 1998. Chemical parameters, such as salt concentration, and physical parameters, such as temperature, are measured at several depths at each site. The U.S. Army Corps of Engineers (USACE) uses this data in development of the Environmental Impact Statement for the emergency outlet plan for Devils Lake. Current plans for the emergency outlet call for a pipeline from the West Bay of Devils Lake near the Peterson Coulee to the Sheyenne River. The Department of Health is assisting the USACE with several components of the Environmental Impact Statement.

The Department of Health is also assisting the U.S. Geological Survey (USGS) in water quality monitoring. Information gathered will be used in the development of a computer model for Devils Lake. The model will be used to indicate salt levels in water released through the emergency outlet.

The Department is expediting its review of USACE 404 permits. These permits are for dredge and fill and levee construction activities.

### **N.D. Department of Transportation (DOT)**

The N.D. Department of Transportation (DOT) has sent a letter of intent to the Federal Highway Administration (FHWA) indicating its plans to pursue emergency relief funding because of problems created by flooding. DOT staff members are compiling estimates and justifications to support the request.

The warm, dry weather experienced in recent weeks has allowed contractors to resume construction operations. There is construction activity on most of the holdover projects from 1997.

The N.D. Highway 57 grade raise at the Narrows has been awarded to Park Construction of Minnesota. The bid was approximately 28 percent below the engineer's estimate, or about \$8.7 million. The project calls for elevating the road to 1,456.6 feet and the bridge to 1,462.5 feet.

DOT does not intend to close N.D. Highway 20 at the Narrows and will make every reasonable effort to keep the highway open and in acceptable driving condition.

A contractor has been working on applying the prime coats of asphalt on U.S. Highway 281 and N.D. Highway 19 north of Minnewaukan. When this work is done, the contractor plans to then apply prime coat to N.D. Highway 20 at Acorn Ridge and Camp Grafton, and at the Narrows. This work will weather proof and stabilize the surface of these roads, eliminating current problems in maintaining the gravel-surfaced roads.

DOT is designing a project to add additional rip-rap on Devils Lake crossings to protect shoulders from higher lake levels. DOT is working with the FHWA to determine if such work would be covered under last year's emergency highway funding. If not, some of this work may be financed through normal construction funds, which will negatively impact other projects throughout the state that are scheduled to be let in upcoming months.

Two areas have experienced erosion problems due to water overtopping rip-rap protection, or extending beyond the end of the rip-rap. Emergency contracts have been awarded to repair these areas, one along N.D. Highway 19 at Mauvais Coulee and the other along N.D. Highway 200 east of Hurdsfield.

Another emergency contract is currently being worked on to repair the soft spots on N.D. Highway 19 near the Mauvais Coulee bridge.

DOT officials have decided to design a new bridge for the south U.S. Highway 281 Mauvais Coulee crossing. The project will be let in either July or August. The highway will be raised to 1,451 feet, the same elevation as the remainder of U.S. Highway 281. The road's present elevation is 1,445.8 feet.

Paving contracts for the grade raises north and south of Minnewaukan were scheduled to be let on May 15. Paving contracts for other area grade raises will be let in June. Paving on N.D. Highway 20 at Acorn Ridge and Camp Grafton may be delayed until later in the year to prevent damage to the pavement due to nearby rip-rap work.

Repairs to the high water area along U.S. Highway 281 west of Ft. Totten are now under contract. This work will probably be completed within six weeks, if favorable weather conditions continue.

The DOT staff is finding more culverts throughout the Devils Lake District that have been damaged by high water flows. Plans are being prepared to have these culverts repaired so that they do not cause sudden, unexpected failures of highway surfaces.

Work is continuing on the grade raises on N.D. Highway 57 at Ft. Totten Bay and on the north side of Sully's Hill. The contractor is still having some problems with a very soft grade at Ft. Totten. DOT is working with the FHWA to obtain the federal agency's concurrence to raise the grade above Devils Lake flood waters.

### **Disaster Outreach Team, Lake Region Human Service Center**

The N.D. Department of Human Services has been granted an extension from the Federal Emergency Management Agency (FEMA) for its Disaster Outreach Project, until September. The project, called Spirit of the Plains Project, was funded by FEMA in response to the 1997 flood disaster. Outreach workers will continue to work out of the Lake Region Human Service Center in Devils Lake. They are writing a newsletter that will include information about services provided by the Disaster Outreach Project, as well as tips on various topics to include coping with stress and advice on parenting. The newsletter will contain facts about Devils Lake.

### **U.S. Army Corps of Engineers (USACE)**

Because of Devils Lake's continued rise, the St. Paul District of the USACE is coordinating with county emergency managers to determine the potential for technical assistance or emergency operations projects in the Devils Lake Basin.

Work continues on the Devils Lake Outlet Project with USACE staff conducting an Environmental Impact Statement and a preliminary design of the project. The 1997 Emergency Supplemental Appropriations Act included \$5 million for these efforts.

Work also continues on efforts to elevate the lake level protection system for the city of Devils Lake. The levee, which now extends seven miles around Devils Lake, will be raised to 1,452 feet. A bid opening for the project was scheduled for May 21. The bid specifications asked contractors to estimate the cost of raising the levee an additional two feet with rock to 1,454 feet and using earthwork to elevate the levee to 1,457 feet.

The USACE is also working with Spirit Lake Nation to determine if there are potential emergency operations projects under Public Law 84-99.

7. ASSISTANCE NEEDED: No change from previous reports.
8. OUTSIDE HELP ON SCENE: No change from previous reports.
9. OTHER: Other web site addresses for flood recovery information include:
  - N.D. Division of Emergency Management: <http://www.state.nd.us/dem>
  - N.D. League of Cities: <http://www.ndlc.org>
  - N.D. State Water Commission: <http://water.swc.state.nd.us>
  - N.D. Attorney General Office: <http://www.state.nd.us/ndag>
  - N.D. Department of Agriculture: <http://www.state.nd.us/agr/>
  - U.S. Army Corps of Engineers: <http://www.ncs-wc.usace.army.mil>
  - U.S. Geological Survey: <http://srv1dndbmk.cr.usgs.gov/public/index.html>

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